

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

June 26, 2008

Chief, Rules, Directives and Editing Branch U.S. Nuclear Regulatory Commission Mail Stop T6-D59 Washington, D.C. 20555-0001

RE: EPA Review and Comments

Draft Generic Supplemental Environmental Impact Statement (DGSEIS)

Vogtle Electric Generating Plant Site

Supplement 34, NUREG-1437

CEQ No. 20080156

Dear Sir:

The U.S. Environmental Protection Agency (EPA) reviewed the subject Draft Generic Supplemental Environmental Impact Statement (DGSEIS) pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act. The document provides information to educate the public regarding general and project-specific environmental impacts and analysis procedures, and follows the public review and disclosure aspects of the NEPA process. The purpose of this letter is to inform you of the results of our review.

Southern Nuclear Operating Company, Inc. (SNC) submitted an application to renew the Operating Licenses (OLs) for the Vogtle Electric Generating Plant (VEGP) Units 1 and 2 for an additional 20 years. The proposed action (license renewal) would provide for continued operation and maintenance of existing facilities and transmission lines. The facility uses water from the Savannah River for plant cooling, and discharges wastewater into the Savannah River via a discharge structure 500 feet downstream from the intake.

The National Pollutant Discharge Elimination System (NPDES) Permit Program authorizes the discharge of pollutants from point source dischargers to waters of the United States. Administration of the NPDES Permit Program in Georgia is delegated by EPA to the Georgia Environmental Protection Division (GA EPD). VEGP has an NPDES permit issued by the GA EPD. The NPDES Permit limits specific pollutant discharges from the plant, requires monitoring of discharges, and regulates the flow and thermal impacts of discharges. The NPDES permittee has operated and is operating in compliance with the NPDES permit requirements.

The DEIS discusses the proposed action and alternatives. Based on EPA's review of the DGSEIS, we are assigning the document a rating of EC-1, meaning environmental concerns exist. (A summary of EPA's rating definitions is enclosed.) Specifically, protecting the environment involves the continuing need for appropriate storage and ultimate disposition of radioactive

wastes generated on-site, as well as continuing measures to reduce entrainment of eggs and larvae due to surface water withdrawals. We have the following specific comments:

Intake screens:

• EPA recommends the applicant use a mesh size for the traveling screens for intake cooling water that is appropriate for the size of eggs, larvae, and juveniles of all fish to be protected at the site. Also, the average intake screen velocity should be less than or equal to 0.5 feet per second in order to prevent entrainment of fish. Surface water withdrawal impacts and impacts to aquatic species during drought conditions are also a concern.

Radiological impacts:

- In the Waste Confidence Rule (10 CFR 51.23), the Commission generically determined that the spent fuel generated by any reactor can be safely stored on-site for at least 30 years beyond the licensed operating life of the reactor. Ultimately, long-term radioactive waste disposition will require transportation of wastes to a permitted repository site. The DGSEIS notes that in the high-level waste and spent fuel disposal component of the fuel cycle, uncertainty exists with respect to regulatory limits for off-site releases of radionuclides for the current candidate repository site. We are aware of ongoing efforts to license a geological repository for long-term disposition within the first quarter of the 21st century.
- Since appropriate on-site storage of spent fuel assemblies and other radioactive wastes is
 necessary to prevent environmental impacts, EPA believes the FGSEIS should provide a
 thorough consideration of impacts resulting from such storage. Given the uncertainty
 regarding ultimate disposal, on-site storage may continue for a longer term than currently
 expected.
- The FGSEIS should describe the actions that Southern Nuclear is taking to mitigate or lessen the release of tritium to the Savannah River. Although the document notes that up to ten percent of tritium releases to the river could be due to plant operations, no reference is made to a level below the drinking water standard where VEGP may initiate additional process controls. An administrative action level should be developed by Southern Nuclear. If there is one, the reference document should be cited in the FGSEIS.
- We note that Savannah River Site is planning to construct and operate a mixed oxide fuel fabrication facility within the next 10 years. Therefore, Southern Nuclear needs to work closely with DOE to minimize radiological impacts on the Savannah River.
- Page 4-24: the line 28 reference to radiological impacts should be Table 4-6.

Thank you for the opportunity to comment on this DGSEIS. We look forward to reviewing the FGSEIS. Please contact Ramona McConney of my staff at (404) 562-9615 if you have any questions or need additional information.

Sincerely,

Heinz J. Mueller, Chief NEPA Program Office

Enclosure: Summary of Rating Definitions

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment